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## Effective Early Childhood Programmes

# EARLY CHILDHOOD IN FOCUS

*Series edited by Martin Woodhead and John Oates*

Early Childhood in Focus is a series of publications produced by the Child and Youth Studies Group at The Open University, United Kingdom, with the support of the Bernard van Leer Foundation.

The series provides accessible and clear reviews of the best and most recent available research, information and analysis on key policy issues, offering clear messages on core policy topics and questions, relevant to the Foundation's three themes of Strengthening the Care Environment, Successful Transitions, and Social Inclusion and Respect for Diversity.

Each publication is developed in consultation with world leaders in research, policy, advocacy and children's rights. Many of these experts have written summaries of key messages from their areas of work especially for the series, and the accuracy of the content has been assured by independent academic assessors, themselves experts in the field of early childhood.

The themes of the series have been chosen to reflect topics of research and knowledge development that address the most significant areas of children's rights, and where a deeper understanding of the issues involved is crucial to the success of policy development programmes and their implementation.

These publications are intended to be of value to advocates for the rights of children and families, to policy makers at all levels, and to anyone working to improve the living conditions, quality of experience and life chances of young children throughout the world.

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*Transitions in the Lives of Young Children: Early childhood and primary education*  
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# Effective Early Childhood Programmes

*Editors*

**Iram Siraj-Blatchford**  
**Martin Woodhead**



EARLY CHILDHOOD IN FOCUS 4

The 'Education for All' *Dakar Framework for Action* prioritised as Goal 1:

Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.

(UNESCO, 2000)

Why should society invest in disadvantaged young children?

The traditional argument for doing so is made on the grounds of fairness and social justice. It is an argument founded on equity considerations. There is another argument that can be made. It is based on economic efficiency. It is more powerful than the equity argument, in part because the gains from such investment can be quantified and they are large.

(Heckman, 2006a)

In many countries and regions, early childhood has received low priority in the development of quality services. These services have often been fragmented. They have frequently been the responsibility of several government departments at central and local levels, and their planning has often been piecemeal and uncoordinated. In some cases, they have also been largely provided by the private and voluntary sector, without adequate resources, regulation or quality assurance. States parties are urged to develop rights-based, coordinated, multisectoral strategies in order to ensure that children's best interests are always the starting point for service planning and provision.

(United Nations Committee on the Rights of the Child, 2005, Paragraph 22)

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# Preface

Political interest in the potential of early childhood education and care (ECEC\*) to help equalise life chances for children from poor backgrounds became prominent in the 1960s, notably through War on Poverty in the USA (Zigler and Styfco, 2004), followed by the Integrated Child Development Services (ICDS) in India in 1974 (Swaminathan, 1998). By the start of the new millennium, increasingly global commitment was signalled at a policy level through the incorporation of Early Childhood Care and Education as Goal 1 within Education for All (EFA) policy (UNESCO, 2000), as well as through very rapid expansion of programmes throughout the world, focusing on early care and development as well as education. Vast numbers of children now participate in some kind of ‘preschool’ programme, making ECEC a highly significant focus for policy and practice development, especially around improving school readiness (and transitions) for the most disadvantaged groups. It is a major global challenge to offer adequate policy responses to the rapid growth in demand for ECEC for all children, while at the same time prioritising quality programmes for disadvantaged children (UNESCO, 2006).

Meanwhile, the case for ECEC has been strengthened by compelling scientific evidence showing improved long-term outcomes for disadvantaged children who participate in a high-quality programme. After many decades of reliance mainly on US studies, a growing body of evidence is available from a wide range of well-planned programme strategies in diverse national contexts, including in low-resource countries (see Section II). Translating positive outcomes into the language of economics provides an even more persuasive case for governments to prioritise investing in early childhood, with the promise of long-term returns to society. Even so, contributors to Section I argue that economic (human capital) arguments need to be set in the context of a more fundamental case for early childhood programmes, based on children’s rights, social justice and sustainability.

While the potential for ECEC to change young lives is indisputable, realising this potential through policies and programmes is far from straightforward (Section III). Setting up carefully evaluated model programmes for a few hundred children is one thing; going to scale with millions of young children is quite another. Even ensuring basic equity in access to quality programmes for the most disadvantaged children is proving a major challenge, especially where programmes are neither sufficiently resourced, nor adequately regulated, nor fully integrated within a holistic child care and education policy. Many countries are witnessing a massive growth in private sector services, which often do not serve poor children. And for some of the poorest countries where basic EFA goals for primary education are still out of reach, ECEC is still a low priority (UNESCO, 2008).

**Iram Siraj-Blatchford**

**Martin Woodhead**

Editors

\* Many different terms are used to refer to early childhood services for children and families. For simplicity, we refer throughout to ‘early childhood education and care’, abbreviated to ‘ECEC’.

# I.

## The case for early childhood programmes

*The case for ECEC is founded on multiple, interconnected lines of argument:*

- Respecting every child's rights to care, development and education is the foundation case on which early childhood policies and services can be built.*
- Ensuring equal opportunities for all is a prerequisite for social justice and requires that early childhood provisions compensate for early disadvantages.*
- Early childhood is a crucial period for development and learning, yet it is estimated that over 200 million young children are not reaching their full potential owing to extreme poverty, poor nutrition and inadequate healthcare.*
- There is a strong economic case for investing in early childhood; effective early interventions can repay costs, and may be more cost-effective than later interventions.*
- The sustainable development case looks beyond providing equity for the current global population and attempts to provide equity with future generations in mind.*





# The rights of the child case

*Respecting the rights of the young child is the foundation for effective early childhood programmes*

The UN Convention on the Rights of the Child (United Nations, 1989) is the most significant basis for global policy development on behalf of young children. It requires that governments ('States parties') ensure that all children be respected as persons in their own right and places an obligation on national governments to make regular reports to the UN Committee on the Rights of the Child.

Implementing a child rights agenda within early childhood policies and practices is still only at the beginning. Neglect of early childhood in country reports prompted the UN Committee to devote its Day of General Discussion 2004 to early childhood – defined as 'the period below the age of 8 years'. The UN Committee set out its vision for rights in early childhood in General Comment 7 (UN Committee on the Rights of the Child, 2005). General Comment 7 offers a broad interpretation of the right to education in early childhood, as beginning at birth and closely linked to young children's right to development. General Comment 7 advocates comprehensive, rights-based multisectoral strategies especially for the most vulnerable groups, including community-based services, both for children and for their caregivers.

Respecting young children's rights requires a radical shift in public and professional attitudes (Alderson, 2008). Young children are no longer viewed mainly as passive recipients of services, beneficiaries of protective measures, nor objects of social experiments; rather they are seen as subjects who should be listened to and contribute to change. Nor should early education be viewed primarily as an investment opportunity, building human capital to achieve strong economic outcomes for society. Nor should the main motive for early childhood services be to enable women to enter the labour force. These justifications play a role in policy, but they are not the core rationale for building early education and care policies and services. Child rights are the firmest foundation for policy, recognising that children are social actors, entitled to respect, care, education and comprehensive services in their best interests, and identifying those with responsibility to secure these rights with and on behalf of young children: caregivers, teachers, communities and governments.

**Martin Woodhead**, Professor of Childhood Studies, The Open University, United Kingdom

- *Respecting young children's rights requires a radical shift in public and professional attitudes.*
- *Children's rights are the firmest foundation for developing policy, on which other arguments for ECEC can be built.*
- *The UN Committee has advocated comprehensive rights-based strategies, especially for the most vulnerable groups.*



# The social justice case

*Social justice demands that all young children have access to good-quality learning opportunities*

A commonly held view in Western liberal democracies is that social justice provisions should be based upon equality of opportunity, but that some degree of inequality of outcomes is acceptable, and indeed inevitable. For many, this is a logical consequence of emphasising individual freedom. If individuals are to enjoy freedom then they must also accept responsibility for the choices that they make. For most people, the role of the state in securing social justice is therefore to provide a 'level playing field' where individuals should be protected from disadvantages such as poverty, but remain responsible for any outcome that results from their own choices.

The UN recognises education to be an individual right which does not miraculously appear when children first reach the age to start school. Research evidence from longitudinal studies and from neuroscience has shown that children's earliest learning experiences are the most significant in determining their future progress in education and subsequent success in life. Any 'levelling of the playing field' must take into consideration differences in the quality of the early learning experiences on offer as well as the impact of poverty, ill health, and other adversities. For many disadvantaged children, the quality of ECEC has a significant and long-term influence on their educational performance and life chances (Sylva *et al.*, 2004; Schweinhart *et al.*, 2005). These disadvantages are beyond the control of the individual child and social justice therefore demands that adequate provisions should be made.

This account of social justice has been constructed within a Western liberal discourse and some may therefore question its validity within other cultural contexts. But as Sen (1999) has argued, while philosophical arguments emphasising freedom and tolerance represent a relatively recent innovation, the foundations of these ideas can be found in the ancient cultural traditions of both Western and non-Western societies.

**Iram Siraj-Blatchford**, Professor of Early Childhood Education, Institute of Education, University of London, United Kingdom

- *Social justice requires basic equity, a 'level playing-field', while recognising that outcomes will vary.*
- *Individuals must have freedom to make choices while being protected from the worst effects of poverty and other adversities.*
- *The early years are most significant in shaping children's future, and social justice requires ensuring adequate provisions for learning and development.*



# The human development case

*Preventing the loss of developmental potential is a first priority*

It is estimated that over 200 million children under 5 years of age are not reaching their full potential in mental and social development owing to extreme poverty, and poor health and nutrition. For optimal development young children need loving, warm, consistent and responsive caregivers, within a stimulating environment, with play materials, and opportunities for interaction and learning. Underpinning all of this are good nutrition and health. The environment in early childhood affects brain development. Many factors such as parental care, stimulation, stress, nutrition and environmental toxins can have long-term effects on brain development and function (Grantham-McGregor *et al.*, 2007). Interventions at this time can have long-term benefits and are more cost-effective than interventions at a later age (Heckman, 2006b).

Low levels of parental education and increased stress lead to poor parenting skills, poor child health and nutrition, and a learning environment with limited stimulation. At least seven studies in low-resource countries have followed children from the first 2 years of life to later childhood or adulthood. They all show that children who are born into poor families or are malnourished in the first 2 years have poorer levels of educational attainment or cognitive function; one study showed poorer mental health (Grantham-McGregor *et al.*, 2007).

Low levels of educational attainment lead to poor employment opportunities and reduced income in adulthood, and poverty is transmitted to the next generation. By preventing the loss of developmental potential that affects millions of children worldwide during the first 5 years of life, we can interrupt the cycle of poverty and help to promote equity in society. Systematic interventions demonstrate what is possible. A long-term follow-up study of a low-cost home visiting programme with poor children in Jamaica showed sustained benefits in intelligence, school achievement, reduced drop-out from school (Walker *et al.*, 2005) and improved mental health at 17 to 18 years (Walker *et al.*, 2006). Early childhood education programmes can help to prevent the loss of developmental potential – and they are cost-effective (Heckman, 2006b).

**Sally Grantham-McGregor**, Professor, Institute of Child Health, University College London, United Kingdom

- *The case for ECEC is not just about the years before school. Development begins before birth and is multifaceted.*
- *Capacities for learning are built on good nutrition, quality care and a responsive, loving environment during infancy.*
- *Interventions beginning in infancy can prevent the loss of developmental potential that affects millions of children.*



# The economic case

*Public investments are least adequate for young children, even though the returns can be high*

The wealth of nations largely rests in the capabilities of their people. Inadequate investments in human development are a principal cause of lost human potential and national wealth. Today, investments in human development are least adequate for young children, and the worldwide cost of this underinvestment is in the region of \$1 trillion annually. This problem of underinvestment in young children afflicts developed and developing countries. In the United States of America alone, the annual cost exceeds \$100 billion and could be much more.

The immediate consequences of underinvestment in young children are well known: death and disease, malnutrition, stunted growth, and impaired motor, language, cognitive, social, and emotional development. In the United States of America, these early risks have long-term consequences: school failure and lower achievement; poor physical and mental health; lower workforce productivity; and crime and delinquency. In low-resource countries, where children face greater likelihood of early risks, investment is even more inadequate, particularly for the poorest children.

Increased public investments in the nurturing and education of young children could make a difference and produce large economic returns. The most comprehensive formal economic analyses are from four studies of the costs and benefits of small-scale, high-quality, intensive early childhood programmes for economically disadvantaged populations in the United States of America (Barnett, 1996; Barnett and Masse, 2007; Karoly *et al.*, 1998; Temple and Reynolds, 2007). These four analyses constitute a baseline for interpreting the results of other studies. All of them find that economic benefits far exceed the costs, in two of the studies by a significant magnitude. They also demonstrate that the costs of inadequate investment (the inverse of the benefits) can approach \$300,000 per child. The effects that generated economic benefits in these four studies have been found in many other studies, throughout the world. These include improvements in cognitive and social-emotional capabilities, school progress, mental health, crime rate, and adult earnings (Barnett, 2008a; 2008b).

High-quality programmes are necessary for large economic returns, but existing public programmes are often of meagre quality and, therefore, are likely to be far less effective. The lesson is clear. Ensuring quality must be an essential component of public programme investment.

**W. Steven Barnett**, Director, National Institute for Early Education Research, Rutgers University, Brunswick, United States of America

- *Failure to invest in young children has long-term costs; well-planned investments bring benefits to children, families and society.*
- *Returns on investment can far exceed the original costs of the programme.*





## The sustainable development case

Humanity faces urgent problems affecting local, regional and global environments, and social and economic development. The Earth's limited natural resources are being consumed more rapidly than they are being replaced, and the effects of global warming upon ecological balance and biodiversity are well known. Rising sea levels threaten millions in less-developed nations. The consequences – increasing poverty, migration, food shortages and risks to health and security – are extremely serious. The goals of the UN Decade of Education for Sustainable Development 2005–2014 (UNESCO, 2005) are therefore to integrate the principles, values and practices of sustainable development (SD) into all aspects of education and learning. SD is defined as development that meets the needs of the present, without compromising the ability of future generations to meet their own needs (Brundtland, 1987). It looks beyond providing equity to the current global population to providing equity with future generations in mind (Speth, 2008). There can therefore be little better place to start than in early childhood care and education.

Agenda 21, the action plan for sustainable development drawn up at the United Nations 'Earth Summit' in Rio de Janeiro (UNCED, 1992) prioritises basic primary education. But it is in early childhood that children are at their most vulnerable and most at risk from the impact of environmental challenges. Early childhood is also the period when fundamental attitudes and values are formed. The UN World Summit referred to social development, economic development, and environmental protection, as the three 'interdependent and mutually reinforcing pillars' of sustainable development. The challenge for early educators is therefore to develop educational systems, curricula and pedagogic practices that are sustainable in terms of each of these pillars, and guidelines have now been developed to meet that challenge (Davies *et al.*, 2009).

The concept of education for sustainable development (ESD) is centrally concerned with achieving individual 'freedom' and 'capability' (Sen, 1999), along with commitments to intercultural respect and a recognition of global interdependence. It is therefore essential that access to early childhood education for sustainability (Pramling-Samuelsson and Kaga, 2008) is expanded globally in order to set the foundations for future lives characterised by self-respect, respect for others, and a respect for the environment.

**John Siraj-Blatchford**, Visiting Professor, School of Human Sciences, Swansea University, United Kingdom

**Ingrid Pramling-Samuelsson**, UNESCO Chair on Education for Sustainable Development, University of Gothenburg, Sweden



- *Education for sustainable development is about human development, equity and social justice, but with an additional future-oriented dimension.*
- *In planning for human development and education for present generations, we must also respect the needs and rights of future generations.*
- *ECEC is a crucible for implementing these values in practice with those who are most vulnerable and most open to new possibilities.*

# POLICY QUESTIONS

- ◆ How much money, time and effort should society invest in the care and education of young children from before birth to school entry, over and above what families already invest?
- ◆ What should be the balance of investment in early childhood services: across all young children or targeting the most vulnerable and disadvantaged?
- ◆ What steps are required to ensure that governments include early childhood among their priorities for policy and service development?
- ◆ In building a case for ECEC, how can the following arguments best be employed: child rights, social justice, human development, economic investment and sustainability?
- ◆ How far do these various aspects of the case complement each other?
- ◆ What more do policy makers need in order to ensure that they have a clear and compelling case for investing public resources in early childhood?
- ◆ What role can research into effective programmes play in informing policy and service development, integrated within local child development systems, knowledge and values?



## II.

# Evidence for early childhood programme effectiveness



*Experimental longitudinal studies evaluating early childhood programmes offer compelling evidence of improved school experience and outcomes, as well as more positive lifelong outcomes.*

*For several decades, US studies were the major source of evidence informing policy and advocacy on behalf of young children.*

*Recent reviews have now looked both at small-scale studies and at large-scale programmes in low-resource countries, and found evidence of improved early development in children who participated in the programme.*

*Effective model programmes include parent-focused support and training projects; centre-based teaching and learning; and comprehensive community development initiatives.*

# USA: the HighScope Perry Preschool study

*A systematic evaluation begun in the 1960s has followed children through to the age of 40*

The HighScope Perry Preschool Study is a scientific experiment in the United States of America that has identified the short- and long-term effects of a high-quality, interactive preschool education programme for young children living in poverty (Schweinhart *et al.*, 2005). In the 1960s, David Weikart and his colleagues in the Ypsilanti, Michigan, school district identified a sample of 123 low-income African American children living in poverty and assessed to be at high risk of school failure. They randomly assigned them at ages 3 and 4 either to a group that received a high-quality preschool programme of daily classes and a weekly home visit or to a group that received no preschool programme (Weikart *et al.*, 1978). Because of the random assignment, children's experience in the preschool programme is the best explanation for subsequent group differences in performance. Project staff collected data almost annually on both groups, from ages 3 through 19 and again at 27 and 40. Across all measures, only 6 per cent of the data were missing.

The study shows evidence of programme effects on important life outcomes. The programme group outperformed the no-programme group on various intellectual and language tests from their preschool years up to age 7; school achievement tests at 9, 10, and 14; and literacy tests at 19 and 27. More of the programme group were employed and owned their own homes and cars at 27 and 40, and the programme group had higher median annual earnings. By 40, fewer of the programme group were arrested 5 or more times; arrested for violent crimes, property crimes, and drug crimes; and sentenced to prison or jail. More programme than no-programme males raised their own children. The economic return to society for the programme was \$16.14 per dollar invested.

The conclusion from this study and several others like it (for example, Campbell *et al.*, 2002; Reynolds *et al.*, 2001) is that high-quality early childhood programmes for young children living in poverty in the United States of America contribute to their development in childhood and their school success, adult economic performance, and reduced commission of adult crime, and return high benefits relative to their initial cost.

**Lawrence J. Schweinhart**, President, HighScope Educational Research Foundation, Ypsilanti, United States of America

- *The HighScope Perry Preschool Study was one of the first systematic evaluations of the potential of a preschool programme.*
- *It demonstrated that a high-quality programme can transform children's lives and futures.*
- *Economic analyses suggest that the returns to society were many times greater than the original cost of the programme.*





## Growing global evidence

The HighScope Perry Preschool Programme is without doubt the single most influential experimental study demonstrating early childhood programme effectiveness and enduring benefits for children and society. Several other American early intervention programmes also show beneficial effects through to adulthood. But positive evidence is not restricted to experimental, or 'model' programmes. Long-term effects have also been seen in the large-scale US Head Start programme (Gormley *et al.*, 2004). For example, Euro-American children of single mothers who had attended Head Start earned incomes that were roughly double those children of who did not attend (Garces *et al.*, 2000; Currie and Neidell, 2003).

Reviewing a range of experimental and national public programmes, American economists concluded:

Investments in ECD [Early Child Development] programs easily pay for themselves over time by generating very high rates of return for participants, the public, and government. Good programs produce \$3 or more in benefits for every dollar of investment. While participants and their families get part of the total benefits, the benefits to the rest of the public and government are larger and, on their own, tend to far outweigh the costs of these programs.'

(Lynch, 2004, p. 5)

For several decades, US studies were the major source of evidence informing policy and advocacy on behalf of young children. But recent reviews have now looked both at small-scale studies and at large-scale programmes in low-resource countries, and found evidence of improved early development in children who participated in them (Walker *et al.*, 2007; Engle *et al.*, 2007). Almost all of the 20 evaluations of programmes in Africa, Asia, and Latin America found significant effects on young children's cognitive, and in some cases, social-emotional development. These studies demonstrate that the most effective interventions were comprehensive (health, nutrition and development); targeted younger and disadvantaged children; and were of longer duration, greater intensity, and higher quality. Providing services directly to children and including an active parenting and skill-building component is a more effective strategy than providing information alone (Engle *et al.*, 2007).

**Patrice Engle**, Professor, Cal Poly State University, San Luis Obispo, United States of America

- Evidence for long-term benefits from early childhood programmes relied for many years on a handful of studies, mainly in the United States of America.
- Policy is now informed by both small and large-scale studies, carried out in varied country contexts.



# Colombia: the PROMESA Programme

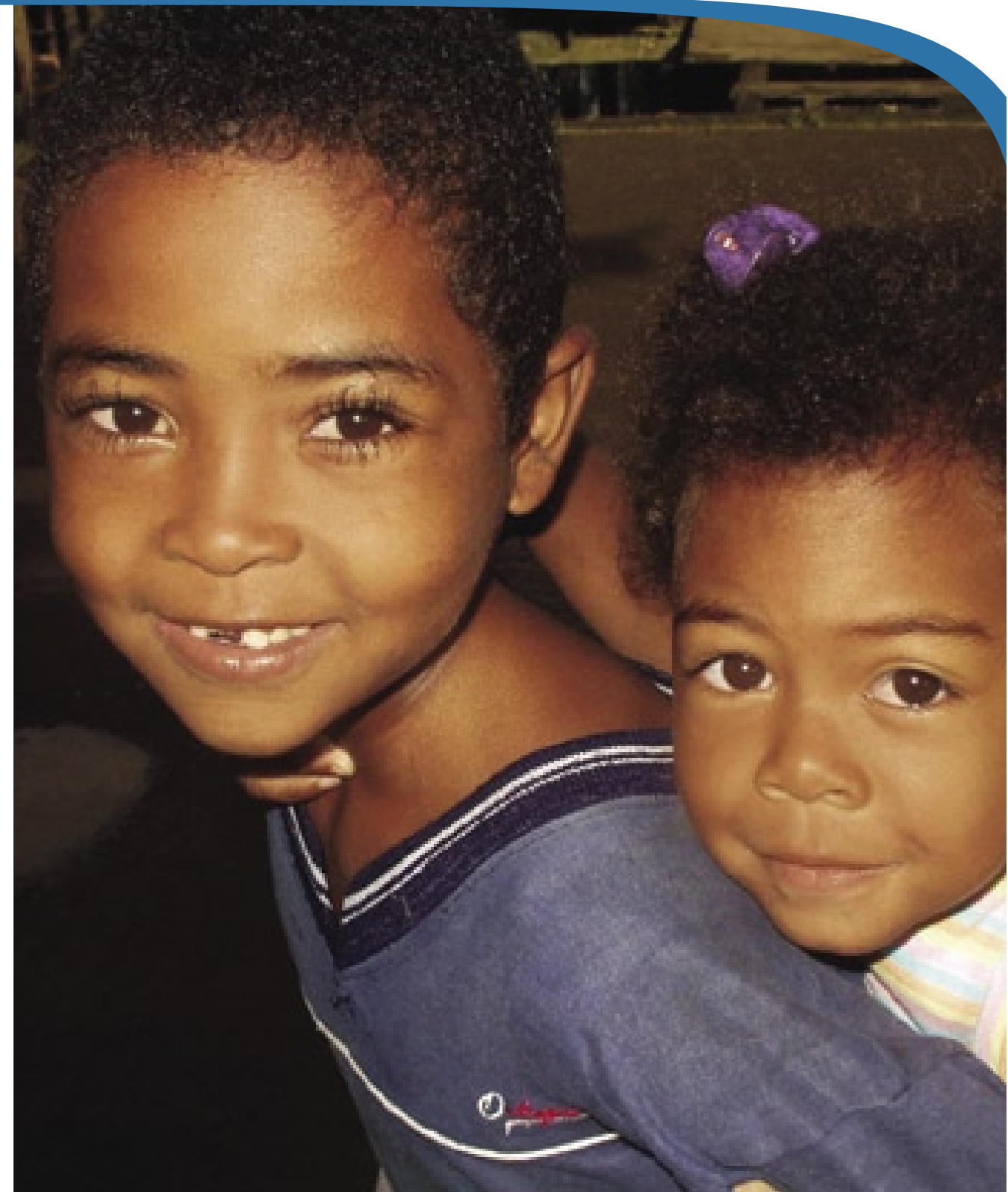
*PROMESA encouraged active participation by children and adults*

In 1978 a small-scale, community-based early childhood initiative began in Choco, a very isolated area of Colombia. It grew into PROMESA, the Programme for the Improvement of Education, Health and the Environment, which was implemented in the Colombian Pacific Coast region for 20 years. The programme was designed to develop an alternative approach to meeting the needs for the healthy development of young children, built around a concept of integral and integrated community development. Its main strategy has been the active participation of children and adults in the solution of their own problems and community problems.

As the project expanded during the following 20 years, a series of innovative approaches were applied, to encourage early stimulation, home-based learning, child to child, as well as play-based and cognitive methods. All the work with children was carried out by local people (mostly women) who were trained by the project. The main thrust was to stimulate the development of young children, and mothers attended weekly sessions run by 'promoters' to learn about the toys and games (based mainly on local culture and materials) so that they could work with their children at home. Older siblings were also involved and a child-to-child component was developed as part of the project. The project found that as mothers saw how their children developed through play they became even more enthusiastic about what they were doing, fathers and other family members became involved and, in time, the whole community participated in different areas of the work (Arango *et al.*, 2004).

**Marta Arango Nimnicht**, Director General, International Center for Education and Human Development (CINDE), Bogotá, Colombia

- *The PROMESA Programme was a comprehensive, community-based project among poor families in Colombia.*
- *It focused on health as well as education, and empowered parents and communities to take responsibility for children's development.*



# The effectiveness of the PROMESA Programme

*Strengthening communities and families helps children to learn*

The original plan to evaluate the impact of the PROMESA Programme in Colombia was introduced in 1980, and intended to last 3 years. But it grew into a long-term study that traced the evolution of the project as well as its effects on the physical, psychosocial and intellectual development of the children and the self-concept of the mothers and community leaders. Our research found that children's academic performance increased and they were less likely to drop out of school. By 1989, 36 per cent of the PROMESA children reached fifth grade, compared to 12 per cent in 1980; many of them went to secondary school and even university. Infant mortality during the first 5 years fell from 11.7 per cent in 1980 to 7.6 per cent in 1989. Illnesses such as malaria decreased and families were more engaged in supporting their children's development.

When the ongoing institutional technical support was stopped, the communities established their own community organisation, in order to promote their own social development independently (Arango and Nimnicht, 1990).

The most important lessons learned from this experience were that:

- strengthening the ability of families and communities to attend to their children's physical and psychological needs should be one of the main goals
- with appropriate training and follow-up, parents with low educational levels can become educational agents of integrated participatory early childhood programmes
- young children's programmes can be the basis for integrated and sustainable social development – a window of opportunity for intervention and change
- social development is a long process that requires a critical mass of organised people involved in a variety of participatory educational processes and actions to produce cumulative effects (Arango *et al.*, 2004).

**Marta Arango Nimnicht**, Director General, International Center for Education and Human Development (CINDE), Bogotá, Colombia

- *The PROMESA Programme reported multiple benefits, including improved health and learning for children, but also improved self-concept among mothers.*
- *Enabling families and communities to support their own social development ensured long-term sustainability of the intervention.*



# Turkey: the Mother–Child Education Programme

*Working with mothers is a key to improving children's prospects*

Beginning as a research project in 1982, the Mother–Child Education Programme was one of the first experimental studies to demonstrate long-term effects of an early childhood programme outside North America. It is also distinctive in targeting disadvantaged mothers in order to bring about change in the immediate environment that supports their children's development. It has now developed into a national NGO, the Mother–Child Education Foundation (Anne Çocuk Eğitim Vakfı (AÇEV)), implemented through a nationwide programme run by the Turkish Ministry of National Education.

Three main components are designed to:

- foster cognitive development in order to prepare children for school by stimulating early literacy and early numeracy skills
- sensitise mothers to issues concerning the overall development of children, help them to provide a stimulating home environment and maintain a consistent and positive mother–child interaction
- inform mothers about healthy pregnancy, safe motherhood and child health.

Several different approaches have been adopted in the implementation of the programme. A group dynamics approach has been found to be most appropriate in supporting parenting skills and a mediated learning approach helps maximise intellectual competence and growth, and ensure that children are better prepared for school.

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- *The Mother–Child Education Programme aims to bring about change in the child's immediate environment and key relationships.*
- *Mothers' confidence and competence are enhanced, so they can support their child's learning and readiness for school.*





# The effectiveness of the Mother–Child Education Programme

*The programme benefited mothers and children long term*

An initial evaluation of the Mother–Child Education Programme in Turkey was carried out between 1982 and 1986 with 255 children and their parents. Results indicated higher levels of cognitive skills for the children of participating mothers (Kağıtçıbaşı *et al.*, 2001). In terms of personality and social development, children of participating mothers displayed less dependency, less aggressiveness and more positive self-concept.

In a follow-up after 7 years, these children were judged (by their mothers and their teachers) to have shown greater 'school readiness'. They went on to achieve better literacy and numeracy skills, and their overall grade scores were higher than children whose mothers had not participated in the programme. They were also more likely to continue their education beyond compulsory school grades and had better school adjustment than the children of mothers who did not participate in the programme. They had more positive retrospective memories of their mothers and showed better social integration and autonomy in terms of their ideas being accepted by their friends and making their own decisions (Bekman, 1998; Kağıtçıbaşı *et al.*, 2001).

The benefits of the programme were also reflected in mothers' relationships with their children. Participating mothers were more verbal, less punitive, more responsive, had more interaction with their children and were cognitively more stimulating. They changed their child-rearing practices, as reflected in behaviours such as keeping promises made to the child and answering their questions appropriately. These mothers had higher self-esteem and they perceived themselves as better mothers, better spouses and more successful individuals. Follow-up after 19 years confirms long-term effects, for example in terms of higher levels of university attendance and higher-status employment for children who had participated in the programme (Kağıtçıbaşı *et al.*, 2009, in press).

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- *Participating mothers developed more positive, cognitively stimulating relationships with their children; their own self-esteem was boosted in the process.*
- *Children of participating mothers developed higher cognitive skills and more positive attitudes, with long-term impact on education and employment.*



# UK: the Effective Pre-school and Primary Education (EPPE) study

*High-quality centre-based programmes have positive benefits*

EPPE is the largest study in Europe on the effects of preschool education on children's intellectual and social and behavioural development (Sylva *et al.*, 2004). The 3000 children in the study were randomly selected at age 3 from preschool settings in England. At the core of the study is a developmental profile for each child, drawn from cognitive, language, social and behavioural assessments which were taken at ages 3, 5, 6, 7, 10 and 11. The researchers then asked parents about the child's history from birth, the family's demographic characteristics, and the learning activities that occurred in the home. The 141 preschool settings attended by the children were studied through interviews, questionnaires and observations and contained all types of group provision, including private, voluntary and state. There was also a 'home' group with no preschool experience (Sammons *et al.*, 2008a; 2008b).

The longitudinal design of the study provides sound evidence on the impact of different types and amounts of preschool provision after taking into account children's characteristics and their home background. Many children left preschool at age 5 with confidence and all the skills needed to tackle learning in primary school. However, a number struggled to adjust and began primary school with poor skills in communication or little capacity to concentrate.

The following are some of the key findings:

- Children who attended preschool made more cognitive and social/behavioural progress compared to those who remained at home.
- Although parents' social class and levels of education were related to child outcomes, the stimulation provided in the child's early home learning environment was an even more important influence.
- Both quality and duration of preschool are important for children's development. Every month of preschool after age 2 is linked to better cognitive development and improved independence, concentration and sociability.
- Higher-quality preschool has an enduring impact to age 11.
- Specific pedagogical and structural practices differentiated more effective pre-schools.
- 'Guided learning' was as important as children's free play, although both are necessary for optimal development (Siraj-Blatchford *et al.*, 2003).
- Case studies showed that children made better progress in preschools that viewed educational and social development as complementary.

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**Iram Siraj-Blatchford**, Professor of Early Childhood Education, Institute of Education, University of London, United Kingdom



- EPPE traced the long-term impact of different types/amounts of preschool provision on 3000 children and compared them to a no-preschool group.
- The research confirmed that attendance at higher-quality preschool had positive benefits, but also that children's early home learning environment was crucial.
- Effective preschools encourage guided learning as well as free play, and recognise social and cognitive development as complementary.
- Higher-quality preschool has lasting benefits throughout primary education.



# POLICY QUESTIONS

- ◆ Which features of currently available research evidence offer the most powerful basis for policy development?
- ◆ What are the implications of recognising the critical influence of mothers and home environments for preschool-age children?
- ◆ What is an appropriate balance between parent- and family-directed strategies and centre-based models?
- ◆ How can development of ECEC be linked to broader community development initiatives and build effectively on existing traditions, initiatives and services?
- ◆ How can the existing evidence of long-term effectiveness be translated across diverse countries, programmes and education systems, to produce a universally valid set of principles or standards?
- ◆ What additional research is required to support effective policy development?
- ◆ In what ways can the monitoring of programme effectiveness be built into the development of early childhood services?
- ◆ What should be the balance between universal services and targeted services for different populations of children?



# III.

## Challenges for early childhood programmes



*Millions of children now access ECEC, but in many regions it is the most vulnerable and disadvantaged who are least able to access quality programmes.*

*Trends towards 'marketising' services run counter to the goals of achieving greater social justice or sustainability through ECEC; strengthening governance is essential.*

*Well-designed evaluations have identified key features of effective programmes, which are not necessarily replicated in large-scale public or private services.*

*Quality challenges are greatest in resource-poor contexts where early childhood programmes risk being viewed as an unattainable luxury, rather than a basic essential.*

*The years just before school have been the major focus of ECEC initiatives, but programmes for earliest infancy are also crucial, recognising the interdependence between early care, adequate nutrition and later learning.*

*Numerous initiatives have potential to support individual development and resilience, in order to encourage virtuous cycles throughout early childhood ... and beyond.*



## Access and equity

The case for expanding quality early childhood programmes is overwhelming, especially for disadvantaged children. The challenges of reaching this goal are highlighted by the *Young Lives* research project (University of Oxford, 2009), which has been tracking the development of 8000 children born in 2000–2001 in Ethiopia, India (Andhra Pradesh), Peru and Vietnam. A high proportion of children had some ECEC experience since the age of 3 in Vietnam (94 per cent), Andhra Pradesh (87 per cent) and Peru (84 per cent). Access was much lower in Ethiopia (25 per cent), where the policy priority has been in expansion of basic primary education (UNESCO, 2007).

Despite these encouraging statistics, in all four countries the most disadvantaged children were less likely to have attended preschool. Equity appears closest to being achieved in both Andhra Pradesh and Vietnam, with only 10 per cent fewer children from the poorest households attending preschool, compared to children from more advantaged homes. This compares with a 25 per cent difference in access in Peru, and 50 per cent in Ethiopia. Another way to look at these differentials is in relation to parent education levels. Among the Peru sample, virtually all children with relatively highly educated mothers (more than 10 years of school) have attended preschool, whereas over 30 per cent of children whose mothers have low levels of education (0–4 years) will have begun first grade without any experience of a preschool programme, which risks perpetuating intergenerational poverty and widening inequalities (Woodhead *et al.*, 2009, in press).

These inequalities are compounded by where children live (rural children are less likely to access ECEC) and the type of preschool they attend (private preschools are now widespread in many countries but mainly benefit the more advantaged children).

In far too many countries, these inequities in early childhood are amplified by inadequacies of the primary schools available to the poorest and most disadvantaged groups (UNESCO, 2008).

**Martin Woodhead**, Professor of Childhood Studies, The Open University, United Kingdom

- *In many countries, ECEC is not achieving its full potential to promote equity and change the lives of the most disadvantaged children.*
- *The most disadvantaged children are least likely to access an early childhood programme and, where they do, the programme is very often of poorer quality than that accessed by children from more affluent families.*
- *In the absence of positive pro-poor policies, there is risk that ECEC will perpetuate intergenerational poverty and widen inequalities.*

*Reaching the most disadvantaged children is a major challenge*



# Equity, governance and the private sector

*Good governance is essential to develop services for all children*

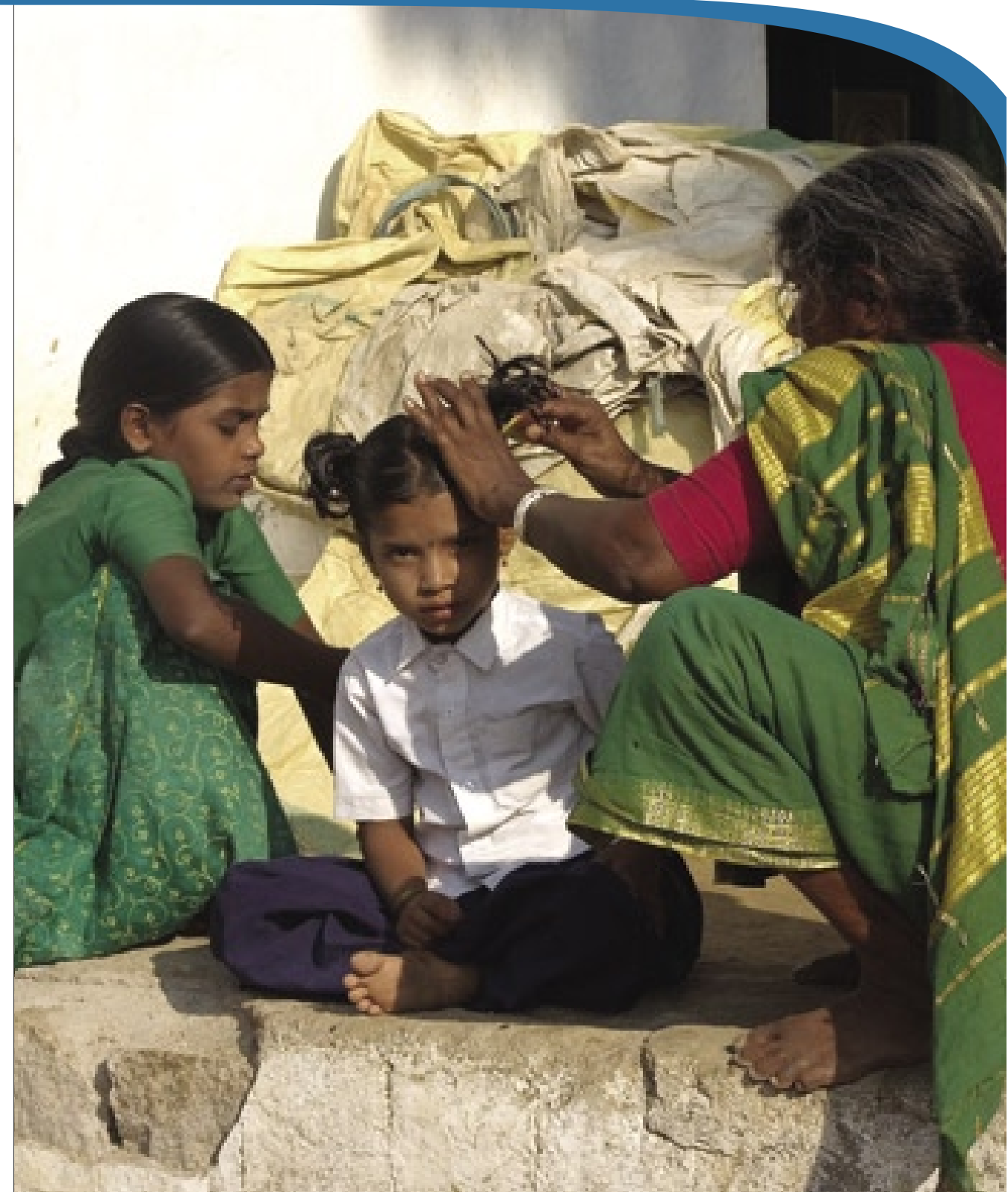
A review of ECEC in OECD member countries noted an increasing trend towards decentralising services, including a growing role for private and for-profit providers. Increased autonomy for providers and finance models championing consumer choice may be incompatible with public policy aims of targeting vulnerable and disadvantaged groups because it becomes difficult to monitor standards and reach, with the consequence that inequalities in both quality and access may increase. The OECD review noted the attraction of a market approach for governments trying to respond quickly to child care shortages, yet stressed the related imperatives of avoiding inequity and adhering to high standards (OECD, 2006).

Market models can even undermine the basic principle of universality in education by weakening governments' regulative capacity; and increasing inequities can occur as providers show reluctance to invest in poor or sparsely populated localities, or to reinvest profits into staff development and enhancing quality. In marketised ECEC systems, economic rationality dictates that parents will focus on their immediate interests and those of their child; they will not consider wider equity issues or community benefits as a reason to choose one service over another. They may even make choices favouring one of their children, especially when costs of quality services are high, relative to household income, as in some low-resource countries, where the private sector is dominant (Woodhead *et al.*, 2009, in press). Other concerns with privatised ECEC include parents' ability to judge the quality of programmes, their ability to pay for high-quality programmes, and the risk of children being moved from one programme to another in pursuit of greater quality or better price. Equally, providers will not pursue wider and longer-term benefits from the services they offer as they aim to minimise costs. The problem doesn't just lie with the private sector. Many governments are also responsible for providing poor-quality programmes that foster inequality. It is also unclear whether for-profit provision in ECEC markets is more efficient than not-for-profit provision. Data from Canada suggest that quality is greater in not-for-profit centres owing to the hiring and retaining of more qualified staff (Cleveland *et al.*, 2007).

**Collette Tayler**, Professor of Early Childhood Education and Care, University of Melbourne, Australia

**Dan Cloney**, Researcher, School of Education, University of Melbourne, Australia

- *Many countries have experienced rapid growth in for-profit private providers, in some cases with minimal regulation.*
- *Marketised ECEC is incompatible with the goals of ensuring basic equity and especially with the goal of targeting the poorest and most disadvantaged.*
- *There may also be risks to children who are moved between different types of provision, with little coordination or continuity.*



# Ingredients for effectiveness

The long-term effectiveness of model early childhood programmes appears to be due to features only rarely found in existing publicly funded or private programmes in the United States of America. Five key features have been identified.

- 1 Include children living in low-income families or otherwise at risk of school failure. Studies have found long-term programme effects on such children, but not yet on children in other circumstances.
- 2 Have enough qualified teachers and provide them with ongoing support. Being qualified is taken to mean having a teaching certificate based on a bachelor's degree in education, child development, or a related field. Ongoing support means receiving curriculum-based supervision and continuing professional development. So that children receive sufficient individual attention, highly effective early childhood classes have two qualified adults, a teacher and an assistant teacher, for every 16 to 20 children aged 4, and smaller numbers for younger children.
- 3 Use a validated, interactive child development curriculum in which both children and teachers have a hand in designing children's learning activities. It focuses on all aspects of children's development – cognitive, language, social, emotional, motivational, artistic, and physical – not just on reading and mathematics. Implementing such a curriculum requires serious interactive training, study and practice, particularly for teachers who have little experience with this type of education.
- 4 Have teachers spend substantial amounts of time with parents, educating them about their children's development and how they can extend classroom learning experiences into their homes. As full day care programmes become more widespread, parent outreach efforts also need to include other caregivers who spend time daily with children in centres and in homes.
- 5 Confirm results through continuous assessment of programme quality and children's school readiness, as feedback to centres and programmes.

Staff striving for highly effective early childhood programmes need to replicate the policies and practices of programmes found to be highly effective, including the five ingredients listed here. The proof that this is being done lies in the assessment of programme implementation, a system for measuring how well a programme meets administrative and teaching standards (Schweinhart and Fulcher-Dawson, 2008).

**Lawrence J. Schweinhart**, President, HighScope Educational Research Foundation, Ypsilanti, United States of America



- The positive benefits found for small-scale model programmes will not apply in large-scale national programmes and services unless certain basic features are assured.
- Five key features of effective programmes have been identified through US research: targeting the most disadvantaged, using well-designed curricula, including a parent component, monitoring quality, and employing well-trained and supported teachers.

# Putting quality into practice

A huge gulf exists between highly publicised, high-quality model programmes and the much larger number of less visible, in some cases barely 'good-enough' programmes experienced by millions of children, especially in resource-poor countries. In some cases, there is a quality crisis in the provision even of basic primary education, let alone ECEC (Arnold *et al.*, 2006). The priority for governments has been on achieving Education for All (EFA) enrolment targets, but without resources or professionals able to deliver on the quality imperative (UNESCO, 2004). Concentrating on enrolments alone makes for impressive yet hollow statistics, if the quality is so low that children suffer 'silent exclusion from worthwhile learning' (Lewin, 2007). And the poorest and most vulnerable groups are most likely to be excluded from quality services, in early childhood as in primary education (UNESCO, 2006).

In these circumstances, it is tempting to argue that high-quality ECEC is unaffordable and unattainable. But that conclusion would fly in the face of the evidence on benefits from programmes, including in low-resource countries, and especially for the most disadvantaged (summarised in earlier sections). It would also condemn millions of children to low-quality and often unregulated services, given that there were an estimated 20 million extra enrolments between 1999 and 2005, especially in South and West Asia (a 67 per cent increase) and sub-Saharan Africa (a 61 per cent increase). Achieving equity and ensuring quality for all these children is as much about effective governance as increasing resources (UNESCO, 2008). An 'Effectiveness Initiative', carried out by the Bernard van Leer Foundation with ten early childhood programmes from Africa, Asia, Europe and Latin America, identified the maze of political, cultural and physical hurdles that have to be overcome in order to leverage effective ECEC policy and practice for the most disadvantaged groups (Yáñez, 2003). Concerted action and innovation are required at every level: governments, donors, NGOs, communities, teachers, teacher trainers, parents and children. Only then can we be sure that early childhood programmes are effective, and are delivering on their potential.

**Martin Woodhead**, Professor of Childhood Studies, The Open University, United Kingdom

- *There are many high-quality ECEC programmes, but the programmes available to the world's poorest young children are often barely 'good-enough'; some are of very poor quality, by any standards.*
- *Focusing on enrolments makes for hollow statistics, unless basic quality is assured for all children.*
- *Ensuring quality is built on effective governance, starting with national governments and permeating down to responsible authorities at every level.*

*Providing a preschool building doesn't ensure an effective programme*





# Is preschool education from the age of 3 or 4 years enough?

*Comprehensive early childhood strategies include the very youngest children*

Whereas the years just before school have been the major focus of early intervention programmes, the importance of supporting development and learning from earliest infancy has long been recognised (Carnegie Task Force, 1994). This is especially true among the world's poorest communities, where children face a large number of health and nutrition risks which are amplified by disadvantages related to their home environment and access to quality education.

Children who are undernourished prenatally and during the first 18 months of life are likely to have 'stunted' growth. These children tend to perform more poorly on cognitive tests, do less well in school, and may be less economically productive as adults (Pollitt *et al.*, 1993). Similarly, children who are anaemic in their earliest years may have permanent deficits in learning potential, as Lozoff found in Costa Rica (Lozoff *et al.*, 2006).

Good nutrition is essential for a child's development but so is the quality of the home environment as earlier sections have highlighted. Children around the world who grow up in less responsive and nurturing homes, as defined by the Home Observation for Measurement of Environment (HOME) scale, tend to score less well on a variety of tasks during primary school (Bradley and Corwyn, 2005).

Interventions to improve children's nutritional status, through feeding, breastfeeding and reducing illness, and to improve development through home visits can have an impact on children's growth and development. For stunted Jamaican children, Grantham-McGregor *et al.* (1991) found that providing food supplements plus home visiting, resulted in significant improvements in children's development. (See also 'The human development case' in Part I.) The group with both food and stimulation interventions scored almost as well as the middle-class group. When the children reached the age of 17–18, they were tested again. This time, the group that had received stimulation outperformed the non-stimulated group, and nutrition made no difference. Many other studies show that improving both nutrition and the nurturing and learning quality of the home environment has greater effects on a child's development than either intervention alone (Pelto *et al.*, 2000).

**Patrice Engle**, Professor, Cal Poly State University, San Luis Obispo, United States of America

- *The major focus of ECEC policies has been readiness for school, during the years prior to first grade, but readiness starts with ensuring adequate nutrition during infancy.*
- *Undernourished babies become stunted, with long-term consequences for development.*
- *Infant interventions are most effective when they combine nutrition with an improved, stimulating and responsive environment for learning.*





# Supporting resilience through the early life course

*Early childhood is a critical window of opportunity*

The young child is growing and searching for new challenges. If they are met by responsive adults and a supportive learning environment, and if malnutrition is not an issue, as a general rule, the result will be positive in a virtuous cycle. If not, the various factors may tend to multiply with negative impact. Early childhood is a critical window of opportunity.

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Children's life courses are highly variable, and it may seem surprising that early interventions such as those reported above could continue to have such a long-lasting impact. In fact, it is very unlikely that positive long-term outcomes are due to a single linear effect of attending an early childhood programme. Every child's learning life course is determined by a unique combination of experiences and events. Some disadvantages (or risk factors) have the potential of leading to underachievement, while others (resilience factors) provide an individual child with the resources to overcome these disadvantages (Masten, 2001; Luthar, 2003). Parents can pass both risks and resilience on to their children, thereby creating social and economic mobility, immobility or inertia across generations. But the various risk and resilience factors interact in complex ways so that very different life events and experiences may lead to similar outcomes, yet life events and experiences that appear very similar may lead to quite different learning outcomes (Siraj-Blatchford and Siraj-Blatchford, 2009).

For most children, poverty and associated adversities present the greatest risks, notably because these impact on adequacy of nutrition and limit the quality of the early home learning environment (Walker *et al.*, 2007). Other children face the early challenges of mental or physical injury or disability, or the effects of discrimination or family trauma. Children's resilience may be supported through multiple strategies, through the quality of learning in the home, through family support intervention and through the provision of high-quality preschool education.

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- *Early childhood is a critical window of opportunity for creating virtuous cycles that help break inter-generational transmission of poverty.*
- *Early childhood programmes may help trigger virtuous cycles, but they rarely have simple direct effects.*
- *Children are affected in different ways and to different degrees by the risk factors in their lives, and by the protective processes that encourage their resilience.*



# POLICY QUESTIONS



- ◆ What steps are needed, first to ensure equity of access to ECEC, and second to ensure that the most vulnerable and disadvantaged have access to high-quality services?
- ◆ Adequate access, provision of quality learning environments, teacher training and regulation of quality are all proven ingredients for effectiveness. What guidelines exist to determine relative allocations of limited resources to each of these areas?
- ◆ How can first steps be taken towards achieving ECEC goals in low-resource contexts, by building on existing strengths in families, health clinics, schools and other formal and informal community resources?
- ◆ What is required for comprehensive policies that focus on babies as well children, on adequate nutrition and health as well as opportunities for learning, on supporting mothers, fathers and home environments, as well as providing centre-based services?
- ◆ How far does growth of the private sector risk undermining equity and social justice in ECEC, and what should governments do to effectively regulate the balance of public and private services?
- ◆ What is the place for a lifespan perspective within policy development, recognising that even the highest-quality ECEC programmes are effective in the context of multiple influences on children, before, during and after they participate?





# References

- Alderson, P. (2008) *Young Children's Rights: Exploring beliefs, principles and practice* (2nd edn), London, Jessica Kingsley.
- Arango, M. and Nimnicht, G. (1990) 'Involving parents in the process of creating appropriate environments for the healthy development of young children: the crucial link between families and schools', in *Children and Youth at Risk. Conference Proceedings*, Washington, DC, OECD.
- Arango, M., Nimnicht, G., and Peñaranda, F. (2004) 'Twenty Years On: A report of the PROMESA programme in Colombia', *Early Childhood Development: Practice and Reflections*, no. 22, The Hague, Bernard van Leer Foundation.
- Arnold, C., Bartlett, K., Gowani, S. and Merali, R. (2006) 'Is everybody ready? Readiness, transition and continuity: reflections and moving forward', background paper for *EFA Global Monitoring Report 2007*, Paris, UNESCO.
- Barnett, W.S. (1996) 'Lives in the balance: benefit-cost analysis of the Perry Preschool Program through age 27', *Monographs of the HighScope Educational Research Foundation*, Ypsilanti, MI, HighScope Press.
- Barnett, W.S. (2008a) *Preschool Education and its Lasting Effects: Research and policy implications*, Boulder CO, Education and the Public Interest Center and Tempe, AZ, Education Policy Research Unit, available online at <http://nieer.org/resources/research/PreschoolLastingEffects.pdf> (Accessed June 2009).
- Barnett, W.S. (2008b) 'Why governments should invest in early education: CESifo-DICE report', *Journal for Institutional Comparisons*, vol. 6, no. 2, pp. 9–14.
- Barnett, W.S. and Masse, L.N. (2007) 'Early childhood program design and economic returns: comparative benefit-cost analysis of the Abecedarian Program and policy implications', *Economics of Education Review*, vol. 26, no.1, pp. 113–25.
- Bekman, S. (1998) *A Fair Chance: An evaluation of the Mother-Child Education Program*, Istanbul, Yapim Publications.
- Bradley, R.H. and Corwyn, R.F. (2005) 'Caring for children around the world: a view from HOME', *International Journal of Behavioral Development*, vol. 29, no. 6, pp. 468–78.
- Brundtland, G. (1987) *UN Brundtland Commission Report: Our common future*, Oxford, Oxford University Press.
- Campbell, F.A., Ramey, C.T., Pungello, E.P., Sparling, J. and Miller-Johnson, S. (2002) 'Early childhood education: young adult outcomes from the Abecedarian project', *Applied Developmental Science*, vol. 6, pp. 42–57.
- Carnegie Task Force (1994) *Starting points: Meeting the needs of our youngest children*, New York, NY, Carnegie Corporation.
- Cleveland, G., Forer, B., Hyatt, D., Japel, C. and Krashinsky, M. (2007) *An Economic Perspective on the Current and Future Role of Non-profit Provision of Early Learning and Child Care Services in Canada: Final report*, Toronto, Human Resources and Skills Development Canada.
- Currie, J. and Neidell, M. (2003) 'Getting inside the "black box" of Head Start quality: what matters and what doesn't? NBER Working Papers, no. 10091, Cambridge, MA, National Bureau of Economic Research.
- Davies, J., Engdahl, I., Otieno, L., Pramling-Samuelsson, I., Siraj-Blatchford, J. and Vallabh, P. (2009) 'Early childhood education', in Ottosson, P. and Samuelsson, B. (eds) *The Gothenburg Recommendations on Education for Sustainable Development*, Gothenburg, The Centre for Environment and Sustainability (GMV), also available online at <http://document.chalmers.se/doc/1751511759> (Accessed July 2009).
- Engle, P.L., Black, M.M., Behrman, J.R., Cabral de Mello, M., Gertler, P.J., Kapiriri, L., Martorell, R., Young, M.E. and the International Child Development Steering Group (2007) 'Child development in developing countries 3: strategies to avoid the loss of developmental potential in more than 200 million children in the developing world', *Lancet*, vol. 369, pp. 229–42.
- Garces, E., Thomas, D. and Currie, J. (2000) 'Longer-term effects of Head Start', *Working Paper Series 00-20*, Santa Monica, CA, Rand Corporation.
- Gormley, W.T., Gayer, T., Phillips, D. and Dawson, B. (2004) *The Effects of Universal Pre-K on Cognitive Development*, Washington, DC, Center for Research on Children in the United States, Georgetown Public Policy Institute and Georgetown University.
- Grantham-McGregor, S.M., Cheung, Y.B., Cueto, S., Glewwe, P., Richter, L., Strupp, B. and the International Child Development Steering Group (2007) 'Child development in developing countries 1: developmental potential in the first five years for children in developing countries', *Lancet*, vol. 369, pp. 60–70.
- Grantham-McGregor, S.M., Powell, C.A., Walker, S.P. and Himes, J.H. (1991) 'Nutritional supplementation, psychosocial stimulation and development of stunted children: The Jamaican study', *Lancet*, vol. 338, pp. 1–5.
- Heckman, J.J. (2006a) *Investing in Disadvantaged Young Children is an Economically Efficient Policy*, paper presented at Building the Economic Case for Investments in Preschool, New York, 10 January 2006, New York, NY, Committee for Economic Development/The Pew Charitable Trusts/PNC Financial Services Group.
- Heckman, J.J. (2006b) 'Skill formation and the economics of investing in disadvantaged children', *Science*, vol. 312, no. 5782, pp. 1900–2.
- Kağitçibaşı, Ç., Sunar, D. and Bekman, S. (2001) 'Long-term effects of early intervention: Turkish low-income mothers and children', *Applied Developmental Psychology*, vol. 22, pp. 333–61.
- Kağitçibaşı, Ç., Sunar, D., Bekman, S., Baydar, N. and Camalcılar, Z. (2009, in press) 'Continuing effects of early enrichment in adult life: the Turkish early enrichment project 22 years later', *Journal of Applied Developmental Psychology*.
- Karoly, L.A., Greenwood, P.W., Everingham, S.S., Houbé, J., Kilburn, M.R., Rydell, C.P., Sanders, M. and Chiesa, J. (1998) *Investing in Our Children: What we know and don't know about the costs and benefits of early childhood interventions*, Santa Monica, CA, Rand Corporation.
- Lewin, K.M. (2007) *Improving Access, Equity and Transitions in Education: Creating a research agenda*, Research Monograph No. 1, Falmer, University of Sussex, Consortium for Research on Educational Access, Transitions and Equity (CREATE), also available online at <http://www.create-rpc.org/publications/pathwaystoaccesspapers.shtml> (Accessed July 2007).
- Lozoff, B., Jimenez, E. and Smith J.B. (2006) 'Double burden of iron deficiency in infancy and low socioeconomic status: a longitudinal analysis of cognitive test scores to age 19 years', *Archives of Pediatrics & Adolescent Medicine*, vol. 160, no. 11, pp. 1108–13.
- Luthar, S.S. (2003) *Resilience and Vulnerability: Adaptation in the context of childhood adversities*, Cambridge, Cambridge University Press.
- Lynch, R. (2004) *Exceptional Returns: Economic, fiscal, and social benefits of investment in early childhood development*, Washington, DC, Economic Policy Institute.
- Masten, A.S. (2001) 'Ordinary magic: resilience processes in development', *American Psychologist*, vol. 56, no. 3, pp. 227–38.
- OECD (2006) *Starting Strong II: Early childhood education and care*, Paris, OECD.
- Pelto, G., Dickin, K., Engle, P. and Habicht, J.P. (2000) *A Critical Link: Interventions for physical growth and psychological development*, Geneva, World Health Organization.
- Pollitt, E., Gorman, K.S., Engle, P.L., Martorell, R., Rivera, J., Wachs, T.D. and Scrimshaw, N.S. (1993) 'Early supplementary feeding and cognition: effects over two decades', *Monographs of the Society for Research in Child Development*, vol. 58, no. 7, pp. i-118.
- Pramling-Samuelsson, I. and Kaga, Y. (eds) (2008) *The Contribution of Early Childhood Education to a Sustainable Society*, Paris, UNESCO, also available online at <http://unesdoc.unesco.org/images/0015/001593/159355e.pdf> (Accessed July 2009).
- Reynolds, A.J., Temple, J.A., Robertson, D.L. and Mann, E.A. (2001) 'Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: a 15-year follow-up of low-income children in public schools', *Journal of the American Medical Association*, vol. 285, pp. 2339–46.



- Sammons, P., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B. and Hunt, S. (2008a) *Effective Pre-school and Primary Education 3–11 (EPPE 3-11) Project – Influences on children's attainment and progress in key stage 2: Cognitive outcomes in year 6*, Research Report No. DCSF-RR048, Nottingham, DCSF Publications.
- Sammons, P., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B. and Jellic, H. (2008b) *Effective Pre-school and Primary Education 3–11 (EPPE 3-11) Project – Influences on children's development and progress in key stage 2: Social/behavioural outcomes in year 6*, Research Report No. DCSF-RR049, Nottingham, DCSF Publications.
- Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R. and Nores, M. (2005) *Lifetime Effects: The HighScope Perry Preschool Study through age 40*, Ypsilanti, MI, HighScope Press.
- Schweinhart, L.J. and Fulcher-Dawson, R. (2008) 'Early childhood education' in Boyd, W.L. (ed.), *Educational Frontiers: AERA handbook on education policy research*, Washington, DC, American Educational Research Association.
- Sen, A. (1999) *Development as Freedom*, Oxford, Oxford University Press.
- Siraj-Blatchford I. and Siraj-Blatchford J. (2009) *Improving Children's Attainment through a Better Quality of Family-based Support for Early Learning*, London, Centre for Excellence and Outcomes, available online at <http://www.c4eo.org.uk/themes/earlyyears/default.aspx?themeid=1> (Accessed June 2009).
- Siraj-Blatchford, I., Sylva, K., Taggart, B., Sammons, P., Melhuish, E.C. & Elliot, K. (2003) *The Effective Provision of Pre-school Education (EPPE) Project: Technical paper 10 – Intensive case studies of practice across the foundation stage*, London, DfES/Institute of Education.
- Speth, J. (2008) *The Bridge at the Edge of the World: Capitalism, the environment, and crossing from crisis to sustainability*, London, Yale University Press.
- Swaminathan, M. (ed.) (1998) *The First Five Years: A critical perspective on early childhood care and education in India*, New Delhi, Sage Publications.
- Sylva, K., Melhuish, E.C., Sammons, P., Siraj-Blatchford, I. and Taggart, B. (2004) *The Effective Provision of Pre-school Education (EPPE) Project: Final report*, London, DfES/Institute of Education.
- Temple, J. and Reynolds, A. (2007) 'Benefits and costs of investments in preschool education: evidence from the Child-Parent Centers and related programs', *Economics of Education Review*, vol. 26, pp. 126–44.
- UNESCO (2000) *Dakar Framework for Action: Education for All – Meeting our collective commitments*, adopted by the World Education Forum, Dakar, Senegal, 26–28 April 2000, available online at [http://www.unesco.org/education/efa/ed\\_for\\_all/dakfram\\_eng.shtml](http://www.unesco.org/education/efa/ed_for_all/dakfram_eng.shtml) (Accessed July 2007).
- UNESCO (2004) *EFA Global Monitoring report 2007: The quality imperative*, Oxford and Paris, Oxford University Press and UNESCO.
- UNESCO (2005) *United Nations Decade of Sustainable Development (2005–2014)*, available online at [http://portal.unesco.org/education/en/ev.php-URL\\_ID=27234&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=27234&URL_DO=DO_TOPIC&URL_SECTION=201.html) (Accessed June 2009).
- UNESCO (2006) *EFA Global Monitoring Report 2007: Strong foundations – Early childhood care and education*, Oxford and Paris, Oxford University Press and UNESCO.
- UNESCO (2007) *EFA Global Monitoring Report 2008: Education for all by 2015 – Will we make it?*, Oxford and Paris, Oxford University Press and UNESCO.
- UNESCO (2008) *EFA Global Monitoring Report 2009: Overcoming inequality – Why governance matters*, Oxford and Paris, Oxford University Press and UNESCO.
- United Nations (1989) *Convention on the Rights of the Child*, UN General Assembly Document A/RES/44/2, New York, NY, United Nations.
- United Nations Committee on the Rights of the Child (2005) *Implementing Child Rights in Early Childhood*, General Comment No. 7, Geneva, United Nations; also available online at <http://www2.ohchr.org/english/bodies/crc/docs/AdvanceVersions/GeneralComment7Rev1.pdf> (Accessed June 2009).
- United Nations Conference on Environment and Development (UNCED) (1992) *United Nations Conference on the Human Environment*, Conference Report, Rio de Janeiro, UNCED.
- University of Oxford (2009) *Young Lives*, available online at [www.younglives.org.uk](http://www.younglives.org.uk) (Accessed June 2009).
- Walker, S.P., Chang, S., Powell, C.A. and Grantham-McGregor, S.M. (2005) 'Effects of early childhood stunting on cognitive and educational outcomes at age 17–18 years and long-term benefits of psychosocial stimulation', *Lancet*, vol. 366, pp. 1804–7.
- Walker, S.P., Chang-Lopez, S.M., Powell, C.A., Simonoff, E. and Grantham-McGregor, S.M. (2006) 'Psychosocial functioning in late adolescence in stunted and non-stunted Jamaican children and the impact of early childhood stimulation and supplementation', *British Medical Journal*, vol. 333, no. 7566, p. 472.
- Walker, S.P., Wachs, T.D., Gardner, J.M., Lozoff, B., Wasserman, G.A. Pollitt, E. and Carter, J.A. (2007) 'Child development: risk factors for adverse outcomes in developing countries', *Lancet*, vol. 369, no. 9556, pp. 145–57.
- Weikart, D.P., Bond, J.T. and McNeil, J.T. (1978) *The Ypsilanti Perry Pre-school Project: Pre-school years and longitudinal results through fourth grade*, Monograph 3. Ypsilanti, MI, HighScope Press.
- Woodhead, M., Ames, P., Vennam, U., Abebe, W. and Streuli, N. (2009, in press) *Access, Equity and Quality in Early Education and Transitions to Primary School: Evidence from young lives research in Ethiopia, India and Peru*, The Hague, Bernard van Leer Foundation.
- Yáñez, J.L. (2003) 'Small but valuable lessons: insights from the Effectiveness Initiative', *Early Childhood Matters*, vol. 101, January, pp. 37–9.
- Zigler, E. and Styfco, S.J. (eds) (2004) *The Head Start Debates*, Baltimore, Brookes.

# Photography

Front cover – Ypsilanti, Michigan, USA. HighScope Educational Research Foundation. Man reading book with child. Courtesy of the foundation

Opposite p. 1 – Indonesia. Muslim girl at a Koranic preschool in Banda Aceh. © Sean Sprague/Still Pictures

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p. 13 – Andhra Pradesh, India. Young girl holding slate at school. © Young Lives/Farhatullah Beig

p. 14 – USA. Preschoolers helping make play dough for their class. © Michelle Del Guercio/The Medical File/Still Pictures

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p. 19 – Indonesia. Muslim children at a kindergarten in Banda Aceh. © Sean Sprague/Still Pictures

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p. 37 – Andhra Pradesh, India. Combing hair ready for school. © Young Lives/Farhatullah Beig

p. 39 – Ypsilanti, Michigan, USA. HighScope Educational Research Foundation. Teacher and children with toy bears activity. Courtesy of the foundation

p. 41 – Andhra Pradesh, India. Young children sitting on classroom floor. © Young Lives/Farhatullah Beig

p. 43 – Phnom Penh, Cambodia. Children’s feeding centre. © Sean Sprague/Still Pictures

p. 45 – Vietnam. Young child from ethnic minority community. © Young Lives/Pham Viet Anh

p. 47 – Chinchá Province (Coastal Plains), Peru. Two young girls. © Young Lives/Lucero Del Castillo Ames

Back cover – Turkey. Mother–Child Education Programme. Boy drawing. © AÇEV/Kaan Akalin



*The young child is growing and searching for new challenges. If they are met by responsive adults and a supportive learning environment, and if malnutrition is not an issue, as a general rule, the result will be positive in a virtuous cycle. If not, the various factors may tend to multiply with negative impact. Early childhood is a critical window of opportunity.*

**Patrice Engle**, Professor, Cal Poly State University, San Luis Obispo, United States of America

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